

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference 2002P20629WO	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/EP2003/014639	International filing date (day/month/year) 19 December 2003 (19.12.2003)	Priority date (day/month/year) 19 December 2002 (19.12.2002)
International Patent Classification (IPC) or national classification and IPC H04M 3/53		
Applicant SIEMENS AKTIENGESELLSCHAFT		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 6 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
 - a. ☒ (sent to the applicant and to the International Bureau) a total of 8 sheets, as follows:
 - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

- ☒ Box No. I Basis of the report
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 06 June 2004 (06.06.2004)	Date of completion of this report 16 March 2005 (16.03.2005)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2003/014639

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language _____, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☐ The international application as originally filed/furnished
- ☒ the description:
- pages _____ 1, 3-19, 21-23, 25, 26, 29-33 _____, as originally filed/furnished
- pages* _____ 2, 2a, 20, 24, 27, 26 _____ received by this Authority on _____ 27 October 2004 (27.10.2004)
- pages* _____ received by this Authority on _____
- ☒ the claims:
- pages _____ 7-37 _____, as originally filed/furnished
- pages* _____, as amended (together with any statement) under Article 19
- pages* _____ 1-6 _____ received by this Authority on _____ 27 October 2004 (27.10.2004)
- pages* _____ received by this Authority on _____
- ☒ the drawings:
- pages _____ 1/4-4/4 _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 03/14639

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	3-14, 17-25, 28-37	YES
	Claims	1, 2, 15, 16, 26, 27	NO
Inventive step (IS)	Claims		YES
	Claims	1-37	NO
Industrial applicability (IA)	Claims	1-37	YES
	Claims		NO

2. Citations and explanations

This report makes reference to the following document:

D1: "3GPP: 3rd Generation Partnership Project; Technical Specification Group Terminals; Multimedia Messaging Service (MMS); Functional description; Stage 2 (Release 4)" 3GPP TS 23.140 V4.2.0, XX, XX, March 2001 (2001-03), pages 1-73, XP002238091

1. Document D1 discloses (the references in parentheses are to that document), in accordance with the features defined in claim 1, a method for delivering a multimedia message to a telecommunications appliance designed as a multimedia message sink (see Chapter 4), in which method
 - (a) the multimedia message is transmitted to and stored at a multimedia message server designed as a multimedia message source for delivering the multimedia message to the telecommunications appliance (page 12: "MMS Relay/Server"),
 - (b) the multimedia message server transmits a notification message directly or indirectly to the telecommunications appliance, notifying the telecommunications appliance where it must dial-in in order to access the stored multimedia message

(page 34, Chapter 8.1.2.3, penultimate paragraph: "Message Reference"),

(d) the telecommunications appliance accesses the multimedia message server or a storage centre associated with the multimedia message server using the dial-in information in order to fetch the multimedia message (page 35, Chapter 8.1.3, first paragraph; Chapter 8.1.3.3, first paragraph; and Chapter 8.1.3.4: table 8; see the description of the entry "Message Reference").

It should be noted that dial-in information could readily be regarded as part of a "Message Reference".

D1 thus contains all the features of claim 1, so that this claim is not novel and does not meet the requirements of PCT Article 33(2).

2. It should also be noted that even if the applicant were to argue that claim 1 is novel because of minor changes with respect to the citation D1, the solution defined in claim 1 would not involve an inventive step in relation to the disclosure of D1 (PCT Article 33(3)) because that document discloses the same subject (delivery of multimedia messages) and the same approach to the solution (temporary storage in a corresponding server and notification to the recipient of additional information regarding the location of the server). Moreover, it should be noted that the indication of dial-in information, such as a dial-in number, for locating a server represents in any case a known and obvious measure for claiming, for example, a value added service or a particular service ("service number").

3. While the subject matter of dependent claim 2 is already known from D1 (Chapter 8.1.3.4: table 8: see the description of the entry "Message Reference") and is therefore not novel (PCT Article 33(2)) in view of the available prior art (D1), the features of claims 3-14 represent only a selection from obvious possibilities and do not involve an inventive step (PCT Article 33(3)).

4. Independent claim 15 merely defines the multimedia message server which corresponds to claim 1 and comprises corresponding conventional technical device features for carrying out the method which are also already known from D1 (see the passages cited in the search report).

Consequently, in accordance with the objections raised in point 1, claim 15 cannot be considered novel (PCT Article 33(2)).

5. The subject matter of dependent claim 16 is already known from D1 (Chapter 8.1.3.4: table 8: see the description of the entry "Message Reference") and is therefore not novel (PCT Article 33(2)), while the features of claims 17-25, in view of the available prior art (D1), represent only a selection from obvious possibilities and do not involve an inventive step (PCT Article 33(3)).

6. Independent claim 26 defines only the telecommunications appliance which corresponds to claim 1 and comprises corresponding conventional technical device features for carrying out the method which are also already known from D1 (see the

passages cited in the search report). Consequently, in accordance with the objections raised in point 1, claim 26 cannot be considered novel (PCT Article 33(2)).

7. The subject matter of dependent claim 27 is already known from D1 (Chapter 8.1.3.4: table 8: see the description of the entry "Message Reference") and is therefore not novel (PCT Article 33(2)), while the features of claims 28-37, in view of the available prior art (D1), represent only a selection from obvious possibilities which does not involve an inventive step (PCT Article 33(3)).

8. The following point should also be considered:

The independent claims are not drafted in the correct two-part form defined by PCT Rule 6.3(b), with a preamble which contains the features known from a document which represents the prior art (D1) (PCT Rule 6.3(b)(i)), and with a characterising part which contains the remaining features (PCT Rule 6.3(b)(ii)).

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Instant Messaging, Over The Air Activation (OTA), email, etc.
- the trend in the fixed network as in the mobile radio area appears to be that SMS and MMS communication services will play a more major role. While the SMS service is already standardized both for the mobile radio area and for the fixed network area (for GSM: ETSI TS 100 942 V7.0.0, Release 1998; for ISDN/PSTN: ETSI ES 201 912 V1.1.1, Release 01/2002), in the case of the MMS service the same only applies to the mobile radio area (see: 3GPP TS 22.140 V4.y.z; stage 1 and 2; release 4), while standardization activities are still ongoing at present in the fixed network area (see: ETSI DES/AT-030023 V0.1.0, 11/2003).

The delivery of a multimedia message to a telecommunication device, whereby the multimedia message is transmitted to a multimedia message service center responsible for the delivery of the multimedia message to the telecommunication device and having an MMS relay/server and stored there and whereby the multimedia message service center sends a notification message, known as the multimedia message notification, to the telecommunication device, informing said telecommunication device of the stored message, is known from the publication 3GPP TS 23.140 V4.2.0, XX, XX, March 2001 (2001-03), pages 1 to 73, XP-002238091: "3rd Generation Partnership Project; Technical Specification Group Terminals; Multimedia Messaging Service (MMS); Functional description; stage 2 (release 4).

The SMS service in the fixed and mobile networks is a point-to-point service, characterized by a pure push functionality - i.e. the content of the short message (SM), the length of which is maximum 160 bytes, is send by the short message service center (SMSC) to the telecommunication device and generally comprises text data - establishment of the

connection being prompted by the service center. While the SMS service in the mobile radio area operates in a connectionless manner between the telecommunication device and the short message service center, in that the short message is transmitted via a signaling channel without a traffic channel connection being set up, in the fixed network the SMS service operates in a connection-oriented manner, in that a traffic channel connection is established between the telecommunication device and the short message service center and the short message is transmitted via this using the service feature Calling Line Identification (CLI), referred to as Calling Line Identification Presentation (CLIP), by means of FSK and/or DTMF signaling (Frequency Shift Keying or Dual Tone Multiple Frequency).

In the case of the MMS service, which operates in the mobile radio network like the SMS service in a connectionless manner

the receive telecommunication center ETKG must dial in to, in order to be able to access and collect the stored multimedia message MMN, the receive telecommunication device ETKG sets up a temporary telecommunication connection according to the dial-in information via the fixed/mobile network FMN or a temporary Internet connection according to the TCP/IP protocol to the multimedia message service center corresponding to the dial-in information, the multimedia message service center MMNDZ, in order to collect the multimedia message MMN that has arrived there and is stored there for collection. The dial-in information EWI is therefore preferably a telephone number. The dial-in information EWI can alternatively also contain other comparable location data or information.

For collection in this manner the receive telecommunication device ETKG has a collection device AHE for collecting messages and/or information, connected on the one hand to the central control device ZSTE and on the other hand for the temporary telecommunication connection or Internet connection to a dial-in node EWK of the multimedia message service center MMNDZ, so that the central control device ZSTE can access the multimedia message service center MMNDZ using the identified dial-in information EWI according to the control path (i) in FIGURE 3 via the collection device AHE and collect the multimedia message.

The dial-in node EWK of the multimedia message service center MMNDZ is connected to the central control unit ZST and from the point of view of the multimedia message service center MMNDZ forms the interface or gateway to the receive telecommunication device ETKG, via which the receive telecommunication device ETKG requests collection and the

multimedia message MMN and forward it for temporary buffering to one of a plurality of storage unit HLS connected to the central control unit ZST and arranged outside the multimedia message service center MMNDZ.

On registration and storage of the multimedia message MMN, the receive telecommunication device ETKG is informed by the central control unit ZST of the multimedia message service center MMNDZ that a multimedia message intended for the receive telecommunication device ETKG is stored for collection in the multimedia message service center MMNDZ. To this end, in addition to the registration means RM, the central control unit ZST has means, preferably also configured as software, to generate notification messages MNEM and means to generate dial-in information EWIEM. The notification message generation means MNEM generate a notification message MN, the MMS notification introduced on implementation of the MMS service in the fixed network, to inform the receive telecommunication device ETKG of the presence of a multimedia message intended for the receive telecommunication device ETKG, while the dial-in information generation means EWIEM generate dial-in information, informing the receive telecommunication device ETKG where it must dial in to, in order to be able to access and collect the stored multimedia message MMN.

Both the notification message MN and the dial-in information EWI are forwarded for this purpose by the central control unit ZST to a send device SEE in the multimedia message service center MMNDZ.

Instead of incorporating the notification message MN and dial-in information EWI directly in the short message KN, it is also possible as an alternative for the notification message MN and dial-in information EWI to be incorporated indirectly in the short message KN, by first incorporating it in a wireless application protocol push message and then incorporating the wireless application protocol push message in the short message KN.

So that the notification message MN and dial-in information EWI can be received by the receive telecommunication device ETKG, this latter has a receiver EM, which is connected to a central control device ZSTE, which again controls the operational and functional processes in the receive telecommunication device ETKG. The notification message MN and dial-in information ultimately pass via this connection into the central control device ZSTE.

The central control device ZSTE contains identification means EKM, preferably configured as software, which identify the received dial-in information EWI forwarded to the central control device ZSTE. Once the dial-in information EWI in particular has been identified and the central control device ZSTE therefore knows which multimedia message service center the receive telecommunication center ETKG must dial in to, in order to be able to access and collect the stored multimedia message MMN, the receive telecommunication device ETKG again sets up a temporary telecommunication connection according to the dial-in information EWI via the fixed/mobile network FMN or a temporary Internet connection according to the TCP/IP protocol to the multimedia message service center corresponding to the dial-in information, the multimedia message service center MMNDZ, in order to collect the

multimedia message MMN that has arrived and is stored there for collection. The dial-in information EWI is again therefore preferably a telephone number. The dial-in information EWI can again however alternatively also contain other comparable dial-in data.

For collection in this manner the receive telecommunication device ETKG has a collection device AHE for collecting messages and/or information, connected on the one hand to the central control device ZSTE and on the other hand for the temporary telecommunication connection or Internet connection to a dial-in node EWK of the multimedia message service center MMNDZ, so that the central control device ZSTE can access the multimedia message service center MMNDZ using the identified dial-in information EWI according to the control path (i) in FIGURE 4 via the collection device AHE and collect the multimedia message.

The dial-in node EWK of the multimedia message service center MMNDZ is again connected to the central control unit ZST and from the point of view of the multimedia message service center MMNDZ forms the interface or gateway to the receive telecommunication device ETKG, via which the receive telecommunication device ETKG requests collection and the multimedia message MMN is output as prompted by the central control unit ZST.

Because the multimedia message MMN with the dial-in information EWI can be collected by the receive telecommunication device ETKG from the multimedia message service center MMNDZ and the central control unit ZST of the multimedia message service center MMNDZ is connected both to the dial-in node EWK and the individual storage units HLS, the

Claims

1. Method for delivering a multimedia message to a telecommunication device configured as a multimedia message sink, wherein
 - a) the multimedia message (MMN) is transmitted to a multimedia message service center (MMNDZ) configured as a multimedia message source for the delivery of the multimedia message (MMN) to the telecommunication device (ETKG) and stored,
 - b) the multimedia message service center (MMNDZ) sends a notification message (MN) directly or indirectly to the telecommunication device (ETKG), to inform the telecommunication device (ETKG) of the stored multimedia message (MMN),
characterized in that
 - c) in addition to the notification message (MN) the multimedia message service center (MMNDZ) also sends dial-in information (EWI) directly or indirectly to the telecommunication device (ETKG), informing the telecommunication device (ETKG) where it must dial in to, in order to be able to access the stored multimedia message (MMN),
 - d) the telecommunication device (ETKG) accesses the multimedia message service center (MMNDZ) or a storage unit (HLS) assigned to the multimedia message service center (MMNDZ) according to the dial-in information (EWI), in order to collect the multimedia message (MMN).
2. Method according to Claim 1, characterized in that the dial-in information (EWI) is inserted into the notification message (MN).
3. Method according to Claim 1 or 2, characterized in that the notification message (MN) is inserted into a short message

(KN) configured as a short message service message, the short message (KN) being sent on the instruction of the multimedia message service center (MMNDZ) from a short message service center (KNDZ) to the telecommunication device (ETKG).

4. Method according to Claim 1 or 2, characterized in that the notification message (MN) is inserted into a wireless application protocol push message and the wireless application protocol push message is inserted into a short message (KN) configured as a short message service message, the short message (KN) being sent on the instruction of the multimedia message service center (MMNDZ) from a short message service center (KNDZ) to the telecommunication device (ETKG).

5. Method according to Claim 3 or 4, characterized in that the short message service center (KNDZ) is instructed by the multimedia message service center (MMNDZ) in that the notification message (MN) and dial-in information (EWI) are sent by the multimedia message service center (MMNDZ) to the short message service center (KNDZ).

6. Method according to one of Claims 1 to 5, characterized in that the multimedia message service center (MMNDZ) transmits information (INF) about the multimedia message (MMN) stored in the multimedia message service center (MMNDZ) to a further multimedia message service center (MMNDZ'), the further multimedia message service center (MMNDZ') sending the notification message (MN) and the dial-in information (EWI) directly or indirectly to the telecommunication device (ETKG) on the basis of the transmitted information (INF).